PARIS AIR SHOW 2015, CHALET A-200 & OUTDOOR DISPLAY AREA A-8 – EXHIBITION HIGHLIGHTS

Elbit Systems' booth comprises four main areas of solutions from the Company's extensive product line:

1. COMMERCIAL AVIATION
2. DEFENSE
3. AIRBORNE SELF PROTECTION
4. UNMANNED AIRCRAFT SYSTEMS AND INTELLIGENCE

COMMERCIAL AVIATION

Clearvision™

Elbit Systems' Clearvision is a complete product family of Enhanced Flight Vision Systems (EFVS), covering the full flight envelop, that overcomes extreme weather conditions and low visibility situations – both day and night. Clearvision allows intuitive "out-of-the-window" flying, minimizing the dependency on airport and helipads instruments, and is designed to reduce landing minima and providing takeoff credit. The Clearvision display fuses conformal flight guidance symbology with synthetic vision presentation and high-resolution Enhanced Vision System (EVS) video on a Head Mounted Display (HMD). The Clearvision suite has been selected by leading Part 25 platforms manufacturers around the world and has now also been introduced on rotary-wing platforms.

- **ClearVision EVS** – The market's first multispectral EVS camera, the EVS sensor allows pilots to carry on operating, and landing in low visibility conditions. ClearVision receives information from several sensors, all neatly packed into a single unit, covering different spectral bands, optimized for penetrating poor visibility and providing a fused picture that overcomes the reliance on heat generating objects.

- **SKYLENS™** - Packed in a lightweight, easy-to-install device, as intuitive as a pair of sunglasses, SKYLENS™ is a revolutionary approach for today's aviators' challenges. Operational in all weather conditions, day and night, SKYLENS provides head-up information and minimizes dependency on airport instrumentation.
  SKYLENS is part of the Clearvision EFVS family, displaying high-resolution information, images and video on a high transparency visor, providing superior see-through transmission.

- **SkyVis™-** is a new system combining our operationally proven HMD with commercially certifiable line-of-sight (LOS) technology and daytime head-up display (HUD) capabilities. SkyVis day or night system offers enhanced situational awareness and enables "Eyes Out" operations, with or without Night Vision Goggles (NVG), during all phases of flight, in marginal weather conditions without compromising safety.

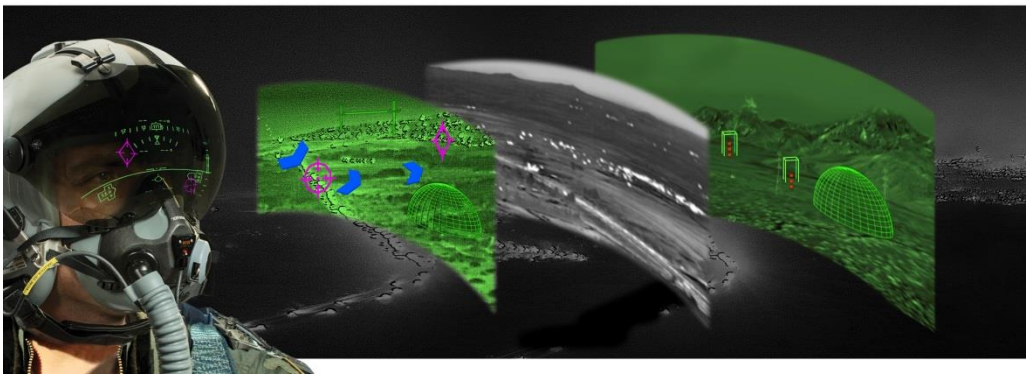
- **HUD**- Our digital HUD is an electro-optic device that presents aircraft data over a transparent glass (combiner), located in front of the pilot. The displayed data is collimated to infinity, enabling the pilot to operate the aircraft using out-the-window view during critical phases of flight.

  With eyes focused out in front of the aircraft viewing the HUD, the aircraft flight path vector, aircraft attitude, visual glideslope angle and the runway aim point, pilots can achieve greater precision and situational awareness at all times while increasing safety. In addition, our modern HUDs can present external video such as EVS video and benefit from lower landing minima's.

DEFENSE

SuperVision™

Harsh environment and weather conditions, in conjunction with an immense flow of information during the flight, call for an intuitive display of flight and visual data. SuperVision generates a conformal image of the world outside the cockpit, as well as the aircraft's systems, surroundings and threats, while fusing together the various layers of information. SuperVision reduces pilots' workload and allows them to focus on the successful completion of their mission, while flying "Head-Out" in any terrain and in all visibility conditions. SuperVision is based on Aero Applications, a "Head Out" vision system and multispectral vision sensors.



- **C-Suite Tactical - Enhanced mission and safety solution for the C-130** - A flexible, modular solution providing accurate, real-time information projected on the HUD, head-down display or HMD, c-Suite Tactical enables safer and better mission execution as well as greater situational awareness.
  C-Suite Tactical is made up of several unique systems based on a Digital Terrain Elevation Database (DTED) and real-time sensors, all aimed to enhance mission capabilities of low altitude tactical flight using Elbit Systems' HUD.

- **Elbit Systems CockpitNG™ -** is based on a smart central Large Area Display (LAD), which includes all avionic components in one suite. The display is fully integrated with the helmet mounted systems and HUD. All of the system's components were developed in a "multi-touch-screen" technology in order to allow the pilot to operate the aircraft in a smooth and customizable manner. This new modular solution enhances mission excellence and reduced aircrew workload and can be tailored to multiple platforms offering full multi-mission support for attack, emergency services training and air support missions.

- **Large Area Display (LAD)** – is a unique large area display (available in custom made sizes), dual redundant, touch-screen enabled and featuring a wide dimming range for night vision goggle compatibility at low luminance levels. All products in this line are smart integrated modular avionics (IMA) displays that can host software applications from either Elbit Systems, customer legacy software or third-party software.

- **Digital-JHMCS –** The Digital Joint Helmet Mounted Cueing System (DJHMCS) is a daily companion for thousands of F-15 and F-16 fighter pilots worldwide.
  DJHMCS is an upgraded, plug-and-play, HMD system based on new technology developed for commercial aviation incorporating the operationally-proven JHMCS, which was launched in 2000 and is in service with over 20 air forces around the world.
  No aircraft installation or modification is required, only a simple upgrade of the HMD. This allows the pilot to benefit from advanced video and color capabilities in both day and night missions, using a modern, lightweight, well-balanced digital HMD system.

- **Brightnite™** - To convert any dark night into the "military pilots' best friend", Elbit Systems presents Brightnite, an affordable non-gimbaled uncooled FLIR sensor, that assures operational flights any night, all night by fusing a real-time video from a multi-spectral sensor, enhanced by 3D flight and mission conformal symbology. The system displays high resolution panoramic imagery to multiple pilots and crew members simultaneously on their Helmet Display and Tracking System (HDTS) regardless of visibility conditions, allowing them to successfully perform missions in more than 90% of the nights.

Training and Simulation

- **Military Pilot Training Solutions** - Elbit Systems provides comprehensive simulator support services such as Contractor Logistics Support (CLS), training, manuals and spare parts. We are fully committed to customer satisfaction. Our customers can avail themselves of our full technical potential to support needs throughout the system lifecycle.
  The latest integrated data environment is employed for visibility into assets in transit, repair, inventory and simulator down-time. Elbit Systems maintains a flexible closed loop Failure Reporting & Corrective Action System (FRACAS) process that provides a framework for identifying and tracking causes of failures and determining and verifying corrective actions.

- **EVA™ -** Embedded Virtual Avionics for Trainer Aircraft, EVA can be installed on basic or advanced trainer aircraft, transforming the aircraft into a virtual advanced fighter while maintaining the hourly training costs of a trainer. The EVA virtual avionics suite is designed to shorten the training gap which exists today between trainer and modern fighter aircraft. EVA is manufactured in a minimal integration configuration, thus reducing aircraft integration costs virtually to zero.

- **SkyBreaker™** - Unlimited Access to the Sky
  Elbit Systems' Mission Training Center (MTC) is a networked multi-cockpit, mission oriented training center supporting many aircraft types.
  The MTC provides realistic simulated battlefield training using all aircraft systems and mission scenarios to enhance all levels of pilot training. A world leader in field-proven training and simulation solutions, Elbit Systems developed SkyBreaker to save actual flight hours by presenting aircrews with high-fidelity, simulator-based training.
  The SkyBreaker facility houses a complex networked system designed to provide an entire squadron with the tools to practice modern air combat using SkyScen™, a sophisticated Computer Generated Forces (CGF) solution, in a fully integrated military setting.

UNMANNED AIRCRAFT SYSTEMS AND INTELLIGENCE

- **Hermes™ 900** Multi-Mission, Multi-Payload Long-Range Medium Altitude Long Endurance (MALE) Unmanned Aircraft System (UAS)

  Recently selected by the Israel Defense Forces, the Hermes 900 UAS offers long endurance, a flight altitude of more than 30,000 ft., unique internal/external payload capacity and flight capabilities in adverse weather conditions. The latest generation Hermes 900 provides a unique, expeditionary, long - endurance and cost-effective solution for a variety of air force, navy, army and paramilitary applications.

- **Skylark™ I-LEX** is a new generation of the legacy Skylark I-LE mini-UAS, man-portable electric propelled, best fitted for organic "beyond the next hill" reconnaissance, counter insurgency and force protection missions, as well as civil applications including perimeter security, border and coastal surveillance, anti-terror and a variety of law enforcement missions. The Skylark I-LEX is already operational as the standard battalion level UAS of the Israeli Land Forces and has accumulated thousands of operational sorties.

PAYLOADS

- **DCoMPASS™** – The Digital Compact Multi-Purpose Advanced Stabilized System (DComPASS) is a highly-stabilized electro-optical payload system, delivering superb day and night intelligence, surveillance, target acquisition and reconnaissance (ISTAR) capabilities in the harshest weather conditions. The multi-sensor system is designed for long-range surveillance and targeting functions for UAS, helicopters, fixed-wing aircraft, maritime and ground platforms. Its small dimensions, low weight, high stabilization level and coverage angles make it an optimal choice for a wide range of applications.

- **AMPS** – AMPS is the largest member of Elbit Systems' battle-proven family of stabilized airborne EO payloads, providing outstanding top end, highly stabilized real-time imagery. Optimized for airborne applications, AMPS delivers superb day and night ISTAR capabilities in all weather conditions. AMPS is being upgraded for longer ranges.
  By providing long observation ranges, the AMPS enhances the quality and increases the output of target intelligence production, while improving crew survivability.

- **EMERALD – AES 212** - Modular Airborne ESM/ELINT Systems for Comprehensive Radar Detection.
  The EMERALD is an operational electronic surveillance measures/electronic intelligence (ESM/ELINT) system for all types of manned and unmanned aircraft platforms. Designed for the densest and most complex electromagnetic environments, it meets the rapidly evolving needs of today's modern battlefields. The system delivers sophisticated intelligence gathering capabilities for the detection and analysis of all types of radars - ground-based, airborne and shipboard.

- **COMINT/DF Systems for UAS** - Our operational and battle-proven communication intelligence/ direction finding (COMMINT/ DF) systems are designed as modular building blocks, capable of tackling various types of communication systems and able to fit any UAS. These systems utilize wideband multi-purpose receivers and meet the requirements of any electronic warfare/ signal intelligence (EW/SIGINT) payload, offering tactical intelligence reception in real time over wide rural and urban areas with precise DF, and enabling digital audio-recording.

- **<u>COMJAM for UAS</u> – is a** battle proven, modular, flexible, standalone, future-ready configuration of customizable, interoperable and interconnected airborne communication jamming (COMJAM) payload components for UAS.
  Special Operations Forces approved, the system manages multiple frequency sub-bands, a predefined threats list, and priority jamming with automatic or manual operation. Deployed as a stand-alone configuration or integrated with additional Elisra EW support systems, COMJAM payload can be mounted on a variety of airborne platforms as well as offer the ideal solution for forward battlefield areas.

AIRBORNE SELF PROTECTION

DIRCM

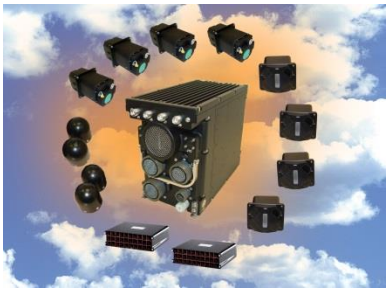
- **<u>C-MUSIC</u>™** (Multi-Spectral Infrared Countermeasure) system is a pod-mounted direct infrared countermeasure (DIRCM) system specifically designed to protect large jet aircraft from infrared missile threats. The pod integrates advanced fiber laser and thermal imaging technologies to deflect shoulder-fired IR missiles (MANPADS) from their intended target.
  C-MUSIC has been selected by the Israeli Ministry of Transportation as the protection suite for all Israel's commercial airlines.

- **<u>J-MUSIC</u>™** - a high-performance DIRCM system for protection of aircraft against MANPADS.
  J-MUSIC is designed for distributed installation on a wide variety of medium to large platforms, with single or multi-turret configuration. It can also be integrated with various missile warning systems (MWS).

- **Mini-MUSIC™-** is the newest member in Elbit Electro-optics Elop's MUSIC family of proven DIRCM systems. Lightweight and compact, mini-MUSIC diverts MANPADS, using the same proven fiber laser technology employed by all the MUSIC® systems. Providing superior protection, mini-MUSIC is easily installed on small and medium rotary and fixed-wing platforms.

- **Air Keeper EW & SIGINT Solution for Aircraft** - A highly advanced solution that provides two significantly critical capabilities in one: intelligence gathering and EW defensive capacities onboard the same platform. The solution enables the aircraft to perform missions for any existing plane as cargo, tanker, transport etc.

- **All-in-Small™** Complete Airborne Self-Protection Suite-
  All-in-Small is a cutting-edge, integrated EW suite in one single LRU, with comprehensive, advanced, EW capabilities. It is comprised of an EWC– EW Controller, RWR – Digital Radar Warning Receiver, PAWS – IR Missile Warning System, LWS - advanced Laser Warning System, and CFD - Chaff/Flare Dispensing system.
  The system is extremely small and lightweight, and has a modular and open architecture with multiple interface abilities. The suite can be effectively integrated with DIRCM, due to its high range detection and DF accuracy, by operating both in the same wavelength, thus enabling extremely fast hand-over from IR PAWS to DIRCM and enhancing deception probability. All-in-Small can be provided together with IR-Centric™, a multi-spectral emitter, as well as geo-location and net-centric capabilities.



- **Unified Self-Protection Suite for Fighter Aircraft**
  The suite includes the most advanced multi-spectral Defense Aid Suites (DAS) and ESM capabilities in a single LRU, delivering the highest DF accuracy, identification, and location of received signals, very high probability of intercept (POI), and enabling swift response .The suite is already deployed onboard various fighter aircraft around the globe.

- **PAWS™** - The PAWS family of IR-based (Infrared) Passive Warning Systems provides a comprehensive, turn-key solution for airborne platforms. The sophisticated IR Missile Warning Systems (MWS) enhance airborne platform survivability by providing advance warning of the presence of threatening missiles - and by automatic management of all types of applicable countermeasures available onboard.
  The PAWS family of systems operates either as stand-alone, self-contained systems, or as part of a complete EW DAS. The systems provide threat information to other EW and/or avionic systems for centralized /Human Machine Interface (HMI) management.

- **IR-CENTRIC™**- IR-CENTRIC solution utilizes the foundations of the de-facto standard in missile warning systems, an infrared-based Missile Warning System (IR MWS), to harness the information streamed from its sensors to facilitate a multi-role multi-function nexus, mission, protection and safety enhancement from one single system, while responding to most modern airborne and ground operational requirements.

EW SIGINT (Signal Intelligence) Solutions for Airborne Platforms

- **ESM/ELINT -** Providing full spectrum 0.5-40 GHz coverage, electronic support measures/ electronic intelligence (ESM/ELINT) capabilities are integrated into the EW subsystems to automatically detect, measure, identify, monitor and intercept all ground-based, shipborne, and airborne radar signals. Elisra's ELINT systems provide continuous/uninterrupted platform protection, surveillance, early warning, information gathering and storage, geo-location and data analysis.

- **COMINT/DF Solutions** - We provide EW intelligence solutions for all levels of command - Strategic, Divisional and Tactical - with combined capabilities of command and control (C2), COMINT/DF, ECM and ELINT, enabling each level of command to operate both standalone and as part of an integrated multi-level system. These solutions provide intelligence capabilities, classification processing and advanced analysis for all levels - delivering full tactical mobility and autonomous real-time responses.